L6 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2002 ACS
AN 1992:179837 CAPLUS
DN 116:179837
TI Multifunctional high-iron cement clinker and its manufacture
IN Zhong, Xingbiao; Huang, Po; Xie, Dong
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 12 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM C04B007-02
CC 58-1 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1052838	A	19910710	CN 1990-106901	19900805
CN 1027971	B	19950322		

AB The cement clinker is prepd. by mixing compounded mineralizing agent, e.g., SO3 + CaF2, in the mixt. of limestone (CaO content <50%), clay (contg. 4-10% sand), low-grade **coal** (heat content 4000 Kcal/kg), and Fe powder to give a resulting mixt. having alumina modulus .ltoreq.0.90 and lime satn. factor 0.980 .+-. 0.03. The obtained clinker comprises C3S 55.0-70.0, C2S 0-5.0, C3A 2.0-6.0, C4AF 18.0-24.0, and C4A3.hivin.S + C11A7.CaF2 2.0-8.0%.
ST sulfur trioxide **mineralizer** cement clinker; calcium fluoride **mineralizer** cement clinker
IT Cement
(clinkers, high-iron, manuf. of, **mineralizers** in)
IT 10034-77-2 12005-25-3 12042-78-3 12068-35-8 12168-85-3, Calcium oxide silicate (Ca3O(SiO4)) 12254-31-8
RL: USES (Uses)
(cement clinker contg., manuf. of high-iron, **mineralizers** in)
IT 7446-11-9, Sulfur trioxide, uses 7789-75-5, Calcium fluoride, uses
RL: USES (Uses)
(**mineralizer**, in high-iron cement clinker manuf.)

L6 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2002 ACS
AN 1966:2577 CAPLUS
DN 64:2577
OREF 64:405a-b
TI Metallurgical exothermic mixtures
IN Mendelsohn, Natie
SO 6 pp.
DT Patent
LA Unavailable
IC C21C
CC 20 (Nonferrous Metals and Alloys)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 1394847		19650409	FR	19640222

AB The title mixts. contg. Al (powder or granules) (I) 5-45, Fe_2O_3 (II) and (or) Fe_3O_4 (III) 10-80, MnO_2 (IV) or pyrolusite (V) 0-25, Al slag (Al_2O_3) (VI) 20-50, alk. or alk.-earth fluorides 0-20, oxidants (nitrates, nitrites, or chlorates) 5-25, siliceous sand (VII), refractory clay, etc., 5-25, isolators (kieselguhr, perlite (VIII), vermiculite) 0-20, **mineralizers** 0.5-5, and charcoal (IX), or mineral **coal** 5-45 wt. % are used to reduce the vol. and prevent the solidification of the deadheads of metal castings. Thus, in the case of Cu alloy castings, a dead-head of 220 kg. was obtained for an ingot of 120 kg. by using an exothermic mixt. contg. I 18, II 12, III 9, IV or V 8, VI 14, NaF 5, $NaCl_2$, $NaNO_3$ 8, VII 7, dolomite 6, VIII 2, IX 10, and ilmenite 2 wt. %. A deadhead of 280 kg. was obtained by using com. exothermic products.

IT Casting process
(for copper alloys and steel, exothermic mixt. for hot tops in)

IT Alkali metal chlorates
Charcoal
(in exothermic hot tops)

IT Coke
(in exothermic mists. for casting hot tops)

IT Alkali metal chlorides
Alkali metal fluorides
Alkali metal nitrates
Alkali metal nitrites
Alkaline earth chlorides
Alkaline earth fluorides
Coal
Dunites
Feldspars
Kieselguhr
Olivine
Phosphates
Pyroxenes
Sand
Sawdust
Silicates
Slags
(in exothermic mixts. for casting hot tops)

IT Copper alloys
(casting of, exothermic mixt. for hot top in)

IT Dolabrin, .beta.-Dolabrin
(in exothermic mixt. for casting hot tops)

IT Fe_3O_4
(in exothermic mixt. for mold hot top)

IT Calcium phosphate
Calcium silicate
Lime

Magnesium titanate(IV)
Manganese oxide, Mn_5O_9
Perlite (the rock)
Serpentine (the mineral)
Zirconium silicate
(in exothermic mixts. for casting hot tops)

IT Fe_3O_4, Fe_2O_3
(in exothermic mixts., for casting hot tops)

IT 7631-99-4, Sodium nitrate 7647-14-5, Sodium chloride 7681-49-4, Sodium fluoride
(in exothermic mixt. for casting hot tops)

IT 12168-52-4, Ilmenite
(in exothermic mixt. for mold hot top)

IT 471-34-1, Calcium carbonate 1302-76-7, Kyanite 1309-48-4, Magnesium oxide 1314-13-2, Zinc oxide 1314-23-4, Zirconium oxide, ZrO_2 1317-70-0, Anatase 1317-80-2, Rutile 1318-00-9, Vermiculite 3486-35-9, Zinc carbonate 7429-90-5, Aluminum 7631-86-9, Silica 7778-18-9, Calcium sulfate 7784-18-1, Aluminum fluoride 7789-75-5, Calcium fluoride 12135-61-4, Sphene 12188-41-9, Brookite 13463-67-7, Titanium oxide, TiO_2 13717-00-5, Magnesite 14681-78-8, Enstatite 14807-96-6, Talc 14808-60-7, Quartz 14854-26-3, Pyrolusite 15096-52-3, Cryolite
(in exothermic mixts. for casting hot tops)